



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/522,285

11/21/2005

Engelbertus Cornelius Petrus Maria Vossen

NL 020700

1498

24737

7590

07/11/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

PERRY, ANTHONY T

ART UNIT

PAPER NUMBER

2879

MAIL DATE

DELIVERY MODE

07/11/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/522,285	<b>Applicant(s)</b> VOSSEN ET AL.	
	<b>Examiner</b> ANTHONY T. PERRY	<b>Art Unit</b> 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

The Amendment filed on 3/28/08, has been entered and acknowledged by the Examiner.

New claim 14 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe (US 5,801,483).

Regarding claim 1, Watanabe discloses a low-pressure mercury vapor discharge lamp comprising a discharge vessel (1), the discharge vessel enclosing, in a gastight manner, a discharge space provided with a filling of mercury and a rare gas (col. 3, lines 10-16), the discharge vessel comprising a luminescent layer (22) and a means for maintaining an electric discharge in the discharge space, a portion of the surface of the discharge vessel facing the discharge space being provided with a protective layer (21) adjacent to the luminescent layer (22), characterized in that the protective layer comprises aluminum oxide or yttrium oxide and further comprises a borate and/or a phosphate of an alkaline earth metal and/or of scandium, yttrium, or a further rare earth metal (for example, see Fig. 7 and col. 3, lines 22-63, col. 5, lines 40-55, and col. 6, lines 22-30).

Regarding claim 2, Watanabe teaches the alkaline earth metal is calcium, strontium, and/or barium (col. 3, lines 22-63).

Regarding claim 3, Watanabe teaches the rare earth metal is lanthanum, cerium, and/or gadolinium (col. 3, lines 22-63).

Regarding claims 4 and 14, Watanabe teaches that the aluminum oxide comprises particles with an effective particle size in the range of .1 to .8 microns (col. 6, lines 27-30).

Regarding claim 5, Watanabe teaches that the protective layer comprises an alkaline earth borate (col. 3, lines 22-63), and in that the thickness of the protective layer is in a range from 0.1 to 50 microns (Table 1).

Regarding claim 6, Watanabe teaches that the protective layer comprises  $\text{SrB}_4\text{O}_7$  (col. 3, lines 22-63).

Regarding claim 7, Watanabe teaches the thickness of the protective layer being in a range from 1 to 20 microns (Table 1).

Regarding claim 8, Watanabe teaches the discharge vessel comprising at least one stem (5), said stem being provided with the protective layer.

Regarding claim 11, Watanabe discloses a low-pressure mercury vapor discharge lamp characterized in that a side of the protective layer facing the discharge space is provided with a luminescent layer of a luminescent material (Table 1).

Regarding claim 12, Watanabe discloses a low-pressure mercury vapor discharge lamp as claimed in claim 11, characterized in that the luminescent layer is provided with an additional protective layer (Table 1).

Art Unit: 2879

Regarding claim 13, Watanabe discloses a low-pressure mercury vapor discharge lamp as claimed in claim 11, characterized in that the luminescent material comprises a mixture of green-luminescent, terbium-activated cerium- magnesium aluminate, blue-luminescent barium-magnesium aluminate activated by bivalent europium, and red-luminescent yttrium oxide activated by trivalent europium (col. 3, lines 22-63).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (US 5,801,483) in view of Hendriks et al. (WO 01/56350).

Regarding claim 9, Watanabe discloses a low-pressure mercury vapor discharge lamp as claimed in claim 1, but does not specifically teach the discharge vessel being made from a glass comprising silicon dioxide and sodium oxide, wherein the glass composition comprises 60-80 % SiO<sub>2</sub> and 10-20 % Na<sub>2</sub>O. Hendriks teaches a vessel made from silicon dioxide and sodium oxide with the percentages by weight as 60-80 % SiO<sub>2</sub>, 10-20 % Na<sub>2</sub>O (page 2, lines 25-28). Hendricks teaches that the glass is relatively cheap compared to the glass conventionally used in discharge lamps. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the glass composition taught by Hendricks in order to reduce manufacturing costs.

Art Unit: 2879

Regarding claim 10, Hendriks teaches a low-pressure mercury vapor discharge lamp, wherein the glass composition comprises the following constituents: 70-75 % SiO<sub>2</sub>, 15-18 % Na<sub>2</sub>O, 0.25-2 % K<sub>2</sub>O by weight (for example, see page 4, lines 2-32). Hendricks teaches that the glass is relatively cheap compared to the glass conventionally used in discharge lamps. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the glass composition taught by Hendricks in order to reduce manufacturing costs.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Anthony Perry* whose telephone number is **(571) 272-2459**. The examiner can normally be reached between the hours of 9:00AM to 5:30PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. **The fax phone number for this Group is (571) 273-8300.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Anthony Perry/

Anthony Perry  
Patent Examiner  
Art Unit 2879  
July 7, 2008

/NIMESHKUMAR D. PATEL/  
Supervisory Patent Examiner, Art Unit 2879